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Exhibit D

Before the
Federal Communications Commission
Washington, DC 20554

In the Matter of	)	
	)	
Developing a Unified Intercarrier Compensation Regime	)	CC Docket No. 01-92
	)	

DECLARATION OF
JANUSZ A. ORDOVER AND ROBERT D. WILLIG
ON BEHALF OF AT&T CORP.

I. QUALIFICATIONS

A. Professor Ordover

1. My name is Janusz A. Ordover. I am Professor of Economics and Director of the MA Program at New York University ("NYU"), which I joined in 1973. At NYU, I teach undergraduate and doctoral level courses in industrial organization economics, the field of economics concerned with competition among business firms and upon which "antitrust economics" is founded. I have devoted most of my professional life to the study and teaching of industrial organization economics and to its application through antitrust and regulatory law and policy.

2. In July 1991, President George Bush appointed me to the position of Deputy Assistant Attorney General for Economics in the Antitrust Division of the United States Department of Justice ("DOJ"). In this post, I participated in the drafting of the 1992 Horizontal Merger Guidelines, which have been widely used by courts and antitrust enforcement agencies. In addition, I led many merger reviews that employed and developed methodologies to define relevant markets in merger and other cases. I returned to NYU in 1993.

3. I have been actively involved in the formulation of public policy in the telecommunications sector. In particular, I have submitted written and oral testimony for AT&T to the Federal Communications Commission and to various state regulatory commissions in the Midwest, New England, and New York on a number of issues, including the pricing of unbundled network elements and access to bottleneck facilities.

4. I have written extensively on a wide range of antitrust and telecommunications topics, such as mergers and joint ventures, predatory conduct, and entry barriers. My antitrust articles have appeared in the ***Yale Law Journal,*** the ***Harvard Law Review,*** the ***Columbia Law Review,*** and many other journals, monographs, and books, here and abroad. A full list of my articles and other professional publications and activities is presented in my ***curriculum vitae,*** which is attached as Exhibit 1.

5. I have lectured extensively on antitrust topics to the American Bar Association, the International Bar Association, and the Federal Trade Commission ("FTC"). I recently delivered lectures to the FTC during its hearings on the Future of Antitrust Enforcement, which were organized by FTC Chairman Robert Pitofsky. I have **also** lectured on antitrust policy at colleges and universities in the United States and abroad, and at many conferences and meetings sponsored by various legal organizations.

6. I have acted as a consultant on antitrust and other competition matters to the **DOJ,** the FTC, and the post-communist governments of Poland, Russia, and Hungary. I have also consulted for the World Bank and the Organization for Economic Cooperation and Development in Paris. I have acted as a consultant in numerous antitrust lawsuits and investigations, including market definition and anti-competitive conduct matters for the FTC, **DOJ,** and private clients in the

United States, Australia, Germany, and the European Union. I have extensive experience in the analysis of competitive effects of business strategies, including tying and bundling.

B. Professor Willig

7. My name is Robert D. Willig. I am Professor of Economics and Public Affairs at the Woodrow Wilson School and the Economics Department of Princeton University, a position I have held since **1978.** Before that, I was Supervisor in the Economics Research Department of Bell Laboratories. My teaching and research have specialized in the fields of industrial organization, government-business relations, and welfare theory.

8. I served as Deputy Assistant Attorney General of Economics in the Antitrust Division of the DOJ from **1989** to **1991.** I also served on the Defense Science Board task force on the antitrust aspects of defense industry consolidation and on the Governor of New Jersey's task force on the market pricing of electricity.

9. I am the author of WELFARE ANALYSIS OF POLICIES AFFECTING PRICES AND PRODUCTS; CONTESTABLE MARKETS AND THE THEORY OF INDUSTRY STRUCTURE (with W. Baumol and J. Panzar), and numerous articles, including ***Merger Analysis, IO Theory, and Merger Guidelines.*** I am also a co-editor of THE HANDBOOK OF INDUSTRIAL ORGANIZATION, and have served on the editorial boards of the ***American Economic Review,*** the ***Journal of Industrial Economics,*** and the MIT Press Series on regulation. I am an elected Fellow of the Econometric Society and an associate of The Center for International Studies.

10. I have been active in both theoretical and applied analysis of telecommunications issues. Since leaving Bell Laboratories, I have been a consultant to AT&T, Bell Atlantic, Telstra, and New Zealand Telecom, and have testified before the U.S. Congress, the Federal Communications

Commission, and the public utility commissions of about a dozen states. I have been on government and privately supported missions involving telecommunications throughout South America, Canada, Europe, and Asia. I have written and testified on such subjects within telecommunications as the scope of competition, end-user service pricing and costing, unbundled access arrangements and pricing, the design of regulation and methodologies for assessing what activities should be subject to regulation, directory services, bypass arrangements, and network externalities and universal service. On other issues, I have worked as a consultant with the FTC, the Organization for Economic Cooperation and Development, the Inter-American Development **Bank,** the World Bank, and various private clients. **A** full list of my articles and other professional publications and activities is presented in my ***curriculum vitae*,** which is attached as Exhibit 2.

II. PURPOSE AND SUMMARY OF STATEMENT.

11. We have been asked by AT&T to comment on the economic issues raised by the Commission's April **27,** 2001 Notice of Proposed Rulemaking ("***Notice***") initiating this proceeding. The ***Notice*** represents an ambitious attempt to rationalize the existing patchwork of regulations that govern the charges a carrier may impose for the transport and termination of traffic originated by customers of other carriers. As the ***Notice*** recognizes, current intercarrier compensation regulations "treat different types of carriers and different types of services disparately, even though there may be no significant differences in the costs among carriers or services." ***Notice*** ¶ 5 ("The interconnection regime that applies in a particular case depends on such factors as whether the interconnection party is a local carrier, an interexchange carrier, a [wireless] carrier or an enhanced services provider; and whether the service is classified as local or long-distance, interstate or intrastate, or basic or enhanced"). We applaud the Commission's stated goal of

rationalizing these disparate regulations and eliminating arbitrary and non-economic differences in pricing. Economic cost-based charges best serve the public interest by promoting the twin goals of efficiency (in investment and use) and competitive neutrality. This is true regardless of the jurisdictional or regulatory classifications of the traffic, carriers, or customers involved and regardless of the networks or technologies used to provide the services. Unsurprisingly, therefore, regulatory arbitrage, monopoly abuse, and the other "pressing issues" the Commission has identified characterize the current regime, in which charges are not consistently based upon economic costs.. ***Id*** **¶¶ 11-18.**

12. The ***Notice*** tentatively concludes that these pressing issues can be addressed effectively only through radical change – abandoning the longstanding "calling party's network pays" (or "CPNP") rule, in which the carrier that serves the calling party pays the called party's network for delivering the call, in favor of a new "bill and keep" (or "B&K") rule, in which the terminating carrier would be required to recover its costs of delivering a call from the called party. ***Id*** **¶ 4.**[1] It is our conclusion instead that no such departure from the CPNP rule is needed to foster efficiency and competitive neutrality. Rather, as we explain below, it is the failure to require forward-looking, economic cost-based prices and not the architecture of CPNP, that facilitates regulatory arbitrage, the abuse of terminating access monopolies, and the other ills that the ***Notice*** identifies. Properly cost-based intercarrier charges provide no windfall to the terminating carrier, and thus, no opportunities for regulatory arbitrage or the imposition of unreasonable prices.

[1] The ***Notice*** does not clearly state whether the Commission intends to adopt B&K as mandatory, or as a default rule. This distinction is largely irrelevant. If traffic is out of balance, the net sender would not agree to any compensation scheme less favorable to it than B&K.

13 We recognize, of course, that setting cost-based rates that replicate competitive market outcomes is no simple task, and we are strong proponents of a first principle of economic regulation that such ratemaking should not even be attempted if markets and competition can be relied upon to accomplish these goals instead. But that plainly is not an option at this time. Incumbent local exchange carriers ("LECs") will continue to have substantial market power for the foreseeable future, and if consumers and competition are to be protected, local rates, including access and interconnection, must therefore be regulated. A B&K rule would neither lessen the need to regulate, nor lighten the burdens of regulation, but would, rather, substitute new regulation of end-user charges for existing regulation of intercarrier charges. Thus, it seems quite plain to us that there is neither a pressing need to switch to B&K to address existing problems nor any apparent savings in the costs of regulation and administration from doing so.

14. Moreover, all things considered, adoption of a B&K rule would be affirmatively harmful to consumers and competition. We begin our consideration of B&K by analyzing whether B&K would be expected to emerge through voluntary arrangements in a hypothetical world in which the relevant telecommunications markets were sufficiently competitive to eliminate any need for regulation. We believe that such a benchmark is relevant inasmuch as socially responsible regulation must aim to replicate as well as possible the outcomes that would emerge in effectively competitive markets. We think that it would be highly unlikely for B&K to emerge as a unique *equilibrium* interconnection and access regime in an effectively competitive telecommunications market. The simple reason is that B&K encourages more unwanted calls

by effectively allowing telemarketers and others to terminate their unwanted calls for free.[2] Worse yet, it forces the called parties to pay terminating charges for the privilege of receiving such unwanted calls. Because most consumers would justifiably resist the imposition of such costs, carriers seeking to satisfy consumers (as would any carrier seeking success in the hypothetical world of effectively competitive markets) would be unlikely to enter into B&K arrangements.

15. The ***Notice*** correctly identifies the need to treat the externalities associated with telephone calls as important in fashioning appropriate interconnection policy. We agree with the Commission on this issue. However, in our view, the Commission seems to place an undue weight on the "positive externalities" from such calls. **As** we demonstrate below, when both positive *and* negative externalities are considered, it is clear that CPNP **is** far more flexible and likely to produce more efficient network usage and better outcomes for consumers than **is** B&K.

16. In addition, a properly administered cost-based CPNP regime would provide much greater protection against regulatory arbitrage and monopoly abuse than would a B&K rule. Indeed, as detailed below, a B&K rule would, among other things, create entirely new opportunities for regulatory arbitrage and give incumbent LECs new ways to abuse their bottleneck monopolies to impede competition.

17. In short, B&K would impose substantial public interest harms and generate few, if any, public interest benefits. Although the ***Notice*** asserts that B&K would solve the problem of "terminating access monopolies," in reality, this problem would not go away under B&K.

[2] Relatedly, to the extent that regulators prohibit carriers from charging usage-sensitive rates, B&K would also discourage carriers from serving customers who receive large numbers of calls.

Instead, the Commission would have to adopt a host of new regulations to protect consumers from exorbitant end-user access charges. Worse yet, the priority and direction of the reforms suggested by the *Notice* would tip the competitive scales even further in favor of the incumbent LECs. In particular, the only traffic for which the *Notice* specifically proposes to replace CPNP with B&K is ISP-bound traffic. The *Notice,* in contrast, contains no specific proposal for the reform of access charges. Under the asymmetrical approach signaled in the *Notice,* compensation that incumbent LECs *pay* to other carriers would quickly be zeroed out, while compensation that incumbent LECs *receive* from those same nascent competitors would continue massively to exceed the relevant costs. If reform is to be phased-in, the proposed order is the *least* consistent with breaking existing monopolies and encouraging competition. We cannot overemphasize that the Commission must take great care to ensure that the reforms undertaken in this proceeding actually produce a single, unified approach that recognizes that the costs associated with delivering traffic do not turn on the identity or status of the originating or terminating carrier or of the calling or called party, and that regulatory transitions are handled in a nondiscriminatory and competitively neutral fashion that does not have the distortionary effect of picking winners (and creating losers).

18. The remainder of our declaration is organized as follows. In Part III, we explain why, regardless of whether transport and termination costs are to be recovered through intercarrier charges (under CPNP) or end-user charges (under B&K), rate regulation is a necessity. In Part IV, we demonstrate why a properly administered cost-based CPNP rule would foster more efficient network usage than a B&K rule. In Part V, we explain that cost-based CPNP would also promote efficient investment decisions so long as intercarrier charges are appropriately set on the basis of forward-looking, economic costs. In Part VI, we demonstrate that cost-based

CPNP would solve each of the pressing issues identified in the ***Notice,*** while a **B&K** rule would likely cause a number of unintended public interest harms.

19. Finally, in Part VII, we address the specific interconnection issues raised in the ***Notice.*** We demonstrate that the ***status quo*** regime in which competitive carriers choose the point or points at which their networks will interconnect with incumbent networks does not distort either carrier's incentives to design and operate their networks efficiently. We further explain why: (1) use of virtual central office codes is generally pro-competitive; **(2)** requiring incumbent LECs to carry transiting traffic on the same economic terms as terminating traffic is both efficient and competitively neutral; and **(3)** the Commission should, to foster competitive and technological neutrality, continue to allow competitive carriers to charge tandem switching rates when they terminate calls from a switch in a "single-layer" switching architecture that serves a geographic area comparable to a tandem switch in the incumbent's "two-layer" switching architecture,

III. REGARDLESS OF WHETHER TRANSPORT AND TERMINATION COSTS ARE RECOVERED THROUGH CARRIER CHARGES OR END-USER CHARGES, REGULATION OF RATES WOULD REMAIN A NECESSITY.

20. We recognize that it is no easy or error-free task for regulators to estimate costs and set rates. The many "bumps in the road" to cost-based reciprocal compensation rates illustrate the difficulties regulators face in a world of imperfect and asymmetric information. We are therefore entirely sympathetic to the desire to find a regime that can remedy existing market distortions but that would not require rate regulation. It is important to recognize from the outset that B&K is no such panacea. Under B&K, the costs that a carrier incurs for transporting and terminating another carrier's traffic do not go away. These costs are instead recovered from end-users instead of carriers. Thus, regulators would have to focus on end-user charges, rather than intercarrier charges, but, either way, rate regulation could not be avoided. In regulating the new end-user charges, regulators would have to resolve the same issues that they face today with respect to regulated intercarrier charges. And, as detailed below, those issues could prove even more difficult in the context of end-user charges.

21. It is beyond serious dispute that control of the bottleneck local telephone facilities over which virtually all telephone calls travel gives the Bell Operating Companies ("BOCs") and other incumbent LECs that serve more than 90 percent of the nation's local telephone lines – and, in most localities, ***all*** consumers – substantial market power over both consumers and potential competitors that need access to those bottleneck inputs. That is why both the incumbents' wholesale charges to competitors and their retail charges to consumers are – and must be – regulated. We, like the Commission, look forward to the time when all local telephone markets are fully competitive, all customers have multiple alternative suppliers, and rate regulation is unnecessary. But more than five years after the passage of the Telecommunications Act of 1996, it is all too obvious that this pleasant dream world not only does not exist today, but is not even on the horizon.[3] In the wake of the collapse of much of the competitive LEC industry in the past year, many have begun to question whether significant local competition outside a

[3] The Commission's recent approval of a handful of BOC section 271 applications does not suggest otherwise. In those orders, the Commission has expressly refused to require the BOC to demonstrate that its local markets are competitive as a precondition to long distance entry. In fact, the Commission has deemed "irrelevant" evidence that the network element rates that the BOC charges potential competitors are too high to permit effective competition. ***See Joint Application by SBC Communications Inc., Southwestern Bell Tel. Co., and Southwestern Bell Communications Services, Inc. for Provision of In-Region, InterLATA services in Kansas and Oklahoma,*** Memorandum Op. and Order, FCC 01-29, ¶ 92 (Jan. 22, 2001). Instead, the Commission has required only that the BOC satisfy the four corners of the "competitive checklist" set forth in section 271, ***id,*** which is only a necessary, but not sufficient, condition for effective competition.

handful of major metropolitan areas can be expected even in the mid-term, five to ten years out. It would certainly be folly to set regulatory policy today on the assumption that all (or even most) local markets will become sufficiently competitive in the next few years to justify ending retail rate regulation.

22. Pursuant to a B&K rule, carriers would recover from their called party customers the costs of transport and termination currently recovered from the carriers whose customers originate the calls. Because most consumers do not have any choice of local carrier, if these end-user charges were not regulated, incumbent LECs could exploit their market power ***vis-a-vis*** end-users by charging supra-competitive rates for termination (through new termination charges or increases to existing end-user charges). Incumbent LECs could also exploit their market power by using termination charge rate design to favor their long distance, information service, and advanced service affiliates at the expense of competing long distance, information service, and advanced service providers. All of this could be masked through bundling, package pricing, and "promotional" discounts, and it would cause great harm to consumers and competition. Accordingly, regulation of the charges for transport and termination of telephone calls is a given regardless of the choice between CPNP and B&K.

23. Indeed, a switch to end-user charges for transport and termination could present additional regulatory difficulties. To the extent that the costs of transport and termination are usage-sensitive, then economic efficiency dictates that charges for those services should also be usage-sensitive.[4] We understand, however, that many state commissions are reluctant to

[4] ***Implementation of the Local competition Provisions of the Telecommunications Act of 1996,*** First Report and Order, 11 FCC Rcd. **15499, ¶ 743 (1996)** ***("'LocalCompetition Order"); see also Access Charge Reform,*** First Report and Order, **12** FCC Rcd **15982, ¶ 6** (May **16, 1997)** ***("Access Reform***
(continued . . .)

impose usage sensitive charges on end-users – indeed, this fact is identified by the Commission as one of the principal reasons why there are "arbitrage" opportunities in the context of ISP-bound traffic. But if state commissions (with regard to end-user charges for terminating "local" traffic) or this Commission (with regard to end-user charges for terminating "long distance" traffic) were to require flat-rated end-user charges for the recovery of usage sensitive costs, new arbitrage opportunities would be created and inefficient network usage would be encouraged. In particular, end-users who receive above-average levels of incoming traffic would be cross-subsidized by average end-users, and therefore, would face no incentives efficiently to utilize the network. Moreover, B&K, at least as proposed in the ***Notice,*** would not even obviate the need for regulation of intercarrier charges and practices. The "COBAK" proposal, for example, would eliminate intercarrier charges only for termination. ***See*** Patrick DeGraba, ***Bill*** and ***Keep at the Central Office as the Efficient Interconnection Regime,*** OPP Working Paper 33, **¶¶ 120-21** (Dec. **2000)** ("COBAK White Paper") Where, as in most areas of the country, the incumbent LEC controls bottleneck transport facilities, market power could, absent rate regulation, just as easily be exercised through transport or **trunk** port charges. Strict regulation of those charges would therefore be required to discourage monopoly abuses. ***See Notice*** **¶¶** ***53,*** **61.**

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Order") ("Because NTS [non traffic sensitive] costs, by definition, do not vary with usage, the recovery of NTS [loop] costs on a usage basis pursuant to our current access charge rules amounts to an implicit subsidy from high-volume users of interstate toll services to low-volume user of interstate long-distance services."); ***id.*** **¶ 24** ("costs of interstate access should be recovered in the same way that they are incurred, consistent with principles of cost-causation. Thus, the cost of traffic-sensitive access services should be recovered through corresponding per-minute access rates. Similarly, NTS cost should be recovered through fixed, flat-rated fees"); ***id*** **¶¶ 178-180, 192, 210-212** (commenting on the
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24. In sum, the choice between CPNP and B&K is not a choice between a "regulatory" solution and a "deregulatory" solution. Rather, the "deregulatory" virtues of a B&K rule are illusory. For that reason, the choice between CPNP and B&K must turn on which of these two regulatory solutions is more likely to produce efficient outcomes. **As** we demonstrate below, CPNP where rates are set on the basis of forward-looking, economic costs is by far the superior regulatory solution.

IV. B&K WOULD NOT PROMOTE MORE EFFICIENT NETWORK USAGE TEXAN COST-BASED INTERCARRIER COMPENSATION.

25. The ***Notice's*** preference for B&K rests, in part, on the premise that because both the called and the calling party "benefit" from a telephone call, both should equally share the costs of the call. **A** B&K rule, the ***Notice*** concludes **(¶ 37),** would mirror this economic reality, simulate the arrangements that would prevail in truly competitive markets, and encourage more efficient usage than CPNP by requiring each carrier to recover its own termination and transport ***costs*** from its respective end-users. Whatever the common sense appeal of this notion, it has the economics backwards.

26. Because there is much confusion regarding the related issues of cost-causation and externalities, we begin our analysis with the basic economics of telephone calls. Efficient utilization of telephone networks requires that the rates end-users pay be based on the costs associated with their usage of the network. Thus, an end-user generally should be charged **only**

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fact that the unitary per-minute rate structure for transport is not cost-causative and taking steps to reform it).

for the costs she causes and should not be charged for costs caused by others or that would have been incurred in the absence of the end-user's usage of the network.

27. The calling party "causes," in the plain meaning of the word, the costs associated with the call that she initiates, including the basic costs of terminating the call. But for the calling party's actions – *i.e.*, placing the call – none of these costs would be incurred. In the absence of externalities, economics would therefore dictate that the calling party should bear the entire cost of the call – *i.e.*, both the costs of originating the call on the calling party's network ***and*** the basic costs of terminating the call on the called party's network.[5] However, as the ***Notice*** observes, there plainly are positive externalities associated with some (but certainly not all) telephone calls. **As** our colleague Professor Baumol has written, it is standard economics that **an** externality occurs where there is a divergence between private and social costs and benefits. William J. Baumol, ECONOMIC THEORY AND OPERATIONS **ANALYSIS 517-20 (4th** ed. **1977).** Here, this means that, from a social welfare perspective, consumers will under-utilize telephone networks unless there is a mechanism by which they can "internalize" the benefits that called parties derive from phone calls.

28. However, this is only half the story. The ***Notice*** fails to recognize that there are also strong ***negative*** externalities associated with many telephone calls and that these externalities too must be taken into account in evaluating alternative choices of intercarrier compensation regimes. Quite often, called parties do not wish to receive certain telephone calls. **A** called party may not want to receive a call based on the identity of the person calling (*e.g.*, ex-spouse), the

[5] We emphasize that the calling party causes the ***costs* of** a call. **As** we explain below in more detail, by this we mean forward-looking, economic costs. The calling party is ***not*** responsible for all of the (continued . . .)

subject matter of the call (*e.g.*, a sales pitch), or the timing of the call (*e.g.*, dinner time). In these cases, the called party gets ***no*** benefit from the call but would, in fact, strongly prefer that the calling party pay more than the direct costs of the call in order to deter such calls. Thus, efficient compensation regulation must also provide incentives, to the extent feasible, to callers to desist from making calls that are undesired by the called party.

29. Plainly, no single rule can ensure that all positive and negative externalities are perfectly internalized. Telephone calls may confer various degrees of positive externalities, varying levels of negative externalities, or no externalities at all; the variation from call to call is enormous; and the size of the externalities associated with any given call may bear no relation to the direct costs of originating and terminating it. As such, the search must be for the rule that minimizes negative externalities by forcing callers to at least internalize all of the direct costs associated with their calls, but also is flexible enough to allow calling and called parties to internalize positive externalities. Cost-based CPNP is that rule.

30. As one of us has written, although CPNP assigns all of the direct costs of a call to the calling party, CPNP is sufficiently flexible to permit consumers to internalize the positive externalities of calls. ***See*** Robert D. Willig, ***The Theory of Network Access Pricing,*** in *ISSUES* IN PUBLIC UTILITY REGULATION 109 (1979). For example, consumers often agree (or develop a tacit "convention") to take turns calling each other so that each bears the full costs of the share of calls that roughly reflects that party's share of the total benefits associated with their calls. ***Id.*** Similarly, consumers can adjust the length of time they talk to each other when one party is

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expenditures incurred by the terminating carrier to terminate the call, which may very well be in excess
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paying in order to account for relative costs/benefits.[6] Also, "called party pays" options – *e.g.*, collect calls, pre-paid calling cards provided to children, and 800 numbers – can be used in situations where the called party exclusively (or predominantly) benefits, or for other reasons has affirmatively volunteered to shelter the calling party from paying.'

31. CPNP also reduces, to the greatest extent possible, the negative externalities associated with telephone calls. CPNP requires the calling party to pay for the entire cost of the call. Higher costs to the calling party reduce the supply of unwanted calls.' Of course, no rule regarding compensation for the direct costs of delivering telephone calls can force the calling party filly to internalize all negative externalities. For example, the harm to the called party whose dinner is interrupted by an unwanted telemarketing call will often be much greater than the few cents it may cost to originate and terminate the call. But CPNP does the best job possible by not allowing the calling party to shift any of the direct costs of the call to the called party.

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of forward-looking, economic costs.

[6] For example, a college student may call his or her parents, chat for a few minutes, and then ask to be called back when it is clear that they will be talking for a while.

[7] The Notice asserts (¶ 63) that B&K would permit long distance carriers to continue to offer 800 service. That is not true. B&K would permit a long distance carrier to offer only a service in which the called party pays for the inter-city portion of the call, because that is the only part of the call handled by the long distance carrier under a B&K regime. See COBAK White Paper ¶ 38. Thus, under B&K, 800 service offered by a long distance carrier would not cover the costs associated with originating and terminating access. Id ¶ 32. Similarly, we see no feasible mechanism by which B&K can establish a "calling party pays" regime with regard to local calls. That would require the called party's carrier to bill the calling party for the costs of termination, but the calling party is not necessarily a subscriber of the called party's carrier.

[8] CPNP, of course, does not filly internalize the negative externality. That could only be accomplished if the calling party were required to pay the called party for receiving the call in addition to paying the carriers for the costs of handling the call.

32. B&K, in contrast, exacerbates the problems associated with negative externalities, without offering a solution for any problems arising from positive calling externalities that cannot be handled through calling relationships. B&K, or at least Dr. DeGraba's COBAK variant, is based on the economic premise that each party to a call gets 50% of the benefits of a call. COBAK White Paper ¶ 59. There is, however, little basis in logic or economics for this assumption. Indeed, in his working paper upon which much of the analysis in the Notice is based, Dr. DeGraba frankly states that there was no empirical basis for this 50-50 assumption and that it is based on nothing more than his intuition that, on average, most parties to a call benefit equally. *Id.* ¶ 59 & n.53.

33. One can conceive of a wide range of scenarios where the called party in fact benefits either relatively more or relatively less than the calling party. For example, the called party gets most of the benefit when an airline calls to let the party know that a flight has been cancelled. On the other hand, the calling party gets all of the benefit from a harassing call.

34. Further, B&K does not even follow its principle that each party bear 50% of the total cost of the call because each party derives 50% of the benefit. Instead, it requires each party's carrier (and therefore each carrier's end-user) to bear its own costs, and the cost of originating the call may be less than or greater than the cost of terminating the call

35. Thus, B&K actually restricts the ability of consumers to internalize the positive externalities of a call. To the extent that parties do not place equal value on a call, and the Notice identifies no empirical evidence indicating that this would usually, or even often, be true, or to the extent that the carriers' costs are different, there is no ready mechanism under a B&K regime that would permit the parties to opt out of, or even to be aware of, the split of the carriers' costs to

reflect their actual preferences. B&K therefore restricts negotiated outcomes and is less likely to produce efficient results.

36. Even more importantly, a **B&K** rule would ***increase*** the harmful impacts of negative externalities associated with calling. As noted, in many instances the called party receives ***nu*** benefit from being called and, in actuality, affirmatively does not want the call. In these circumstances, B&K would in effect ***subsidize*** unwanted calls by requiring the called party to share the costs of unwanted calls.'

37. For these reasons, we believe that in an effectively competitive telecommunications market, many, if not most, customers would try to avoid carriers that exchanged traffic pursuant to **B&K**.[10] A B&K rule would encourage unwanted calls, transfer some of the costs of those calls onto the receiving customer, and interfere with the existing conventions under **CPNP** that allow customers flexibly to adjust their calling patterns to align private and social benefits to the extent that it is possible.[11]

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[9] A "first-minute free" rule could not compensate for the negative externalities exacerbated by a B&K rule. The most significant aspect of the negative externality is the interruption itself, while the small costs associated with terminating the call that B&K would shift to the called party would add financial insult to injury. As explained, B&K would reduce the costs to calling parties and increase the supply of unwanted calls, causing more such costly interruptions.

[10] The only class of consumers that we could see preferring B&K to CPNP are those that both originate many more calls than they receive and that, because of their personal preferences, would receive few unwanted calls under B&K. We believe that this is unlikely to be a substantial portion of the population.

[11] Our criticisms of B&K appear far less compelling in the context of commercial mobile radio service ("CMRS")-interexchange carrier ("IXC") interconnection and we would not recommend that existing, negotiated B&K arrangements between IXCs and CMRS providers be displaced by an access charge regime, as we understand that Sprint has argued. ***See Notice*** ¶ 96. First, and most fundamentally, as we noted above, we believe that a first principle of economics is that centralized regulation should not be used if markets and competition can be relied upon. Here, consumers have numerous alternatives to

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V. INTER-CARRIER RATES APPROPRIATELY SET ON THE BASIS OF FORWARD-LOOKING, ECONOMIC COSTS ARE EFFICIENT AND PROPERLY MIMIC THE WORKINGS OF A COMPETITIVE MARKET.

38. Not only would cost-based CPNP promote efficient network usage, but it also, so long as intercarrier rates are appropriately set on the basis of forward-looking, economic costs, would promote efficient investment decisions. In setting intercarrier rates, the regulator's task is to cap rates at the levels that would prevail in an effectively competitive market. Competitive market prices steer purchasers to the most efficient, least-cost supplier of each good or service for which there is sufficient demand. Competitive market prices guide purchasers to make efficient choices among the different goods and services offered in a market. And competitive market prices provide an opportunity to achieve the level of cost recovery that encourages efficient levels of investment, entry, and exit.

39. As the Commission has recognized, the measure of costs to which prices converge in competitive markets – whether wholesale markets or retail markets – is forward-looking, economic cost and, specifically, long run, incremental cost. Local ***Competition Order* ¶ *672-***703. Incremental cost represents the additional cost to society of producing a particular good or service, if all other outputs are held constant, and thus incremental cost-based prices encourage

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choose from when selecting both their long distance and wireless provider. Second, although we have criticized B&K's failure to provide mechanisms to "internalize" the negative externalities associated with telephone calls, these negative externalities appear less pronounced in the wireless context. It is our understanding that existing laws restrict telemarketing calls to wireless users. Further, wireless users can and do turn their phones off to avoid receiving a call at an unwanted time. Finally, allowing CMRS carriers to collect above-cost access charges would create arbitrage opportunities and effectively require IXCs to subsidize CMRS carriers and their subscribers. Thus, any market distortions that might be caused by B&K in this context are likely to be less than those that would be created by requiring IXCs to pay inflated access charges.

efficient consumption. *Id.* ¶ 675. Incremental cost-based pricing likewise encourages efficient investment, entry, and exit, because in competitive markets, firms decide whether to expand or enter new markets by comparing the expected costs of expansion or entry with the expected incremental revenue.

40. The proper time horizon for calculating incremental costs is the long run. Entry and expansion decision are based on long run costs, because all costs of entry are variable before the necessary investment is **sunk.** Accordingly, the threat of potential entry and actual entry in competitive markets limit prices charged by incumbent firms to the long run costs faced by efficient potential entrants.

41. Finally, long run, incremental cost pricing in this context promotes competitive neutrality. When rates are properly set on the basis of forward-looking, economic costs, a carrier would be indifferent to terminating its own traffic or paying another carrier to do so, depending on the relative efficiencies.

VI. THE "PRESSING PROBLEMS" IDENTIFIED IN THE *NOTICE* RESULT FROM THE FAILURE TO IMPLEMENT FULLY COST-BASED CPNP AND LIKELY WOULD BE EXACERBATED BY B&K.

42. As noted, the ***Notice*** sets forth a list of "pressing problems" associated with the current interconnection regime allegedly attributable to the inherent shortcomings of cost-based CPNP. ***Notice*** **¶¶ 11-18, 116-20.** The ***Notice*** tentatively concludes that B&K regulation would solve these problems. ***Id*** **¶¶ 42-57.** We disagree. Each of the problems identified in the ***Notice*** would, in fact, be ameliorated by adherence to cost-based CPNP. The problems that exist today do not reflect shortcomings of **CPNP,** but the failure to cap intercarrier charges at forward-looking economic costs. In contrast, B&K: (i) would "solve" the "ISP problem" only by

creating entirely new opportunities for regulatory arbitrage, and (ii) would "solve" the terminating access monopoly problem only at the cost of complicated new end-user rate regulation and increased opportunities for incumbent LECs to leverage their local monopolies. Finally, B&K would create additional regulatory problems and the specific proposals discussed in the *Notice* would be difficult to implement in practice.

43. ***Regulatory Arbitrage.*** The ***Notice*** observes **(¶¶ 66-68)** that **B&K** would eliminate the inefficient incentive to build "receive-only" networks because, under B&K, terminating carriers are no longer paid any compensation from the originating carrier. True, **so** long **as** ***end-user*** charges for termination are appropriately constrained either by competition or regulation.[12] Of course, the same is true of a properly administered CPNP regime that caps ***carrier*** charges at forward-looking costs. Forward-looking cost-based rates, by definition, provide no inefficient incentive to serve customers just for the purpose of receiving traffic and earning compensation. Rather, forward-looking cost-based rates allow a carrier to recover only the efficient costs of termination (including a normal return on deployed terminating assets) and therefore create no opportunities for regulatory arbitrage. Any attempt to divorce prices from costs, in contrast, creates opportunity for arbitrage.[13]

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[12] If carriers were permitted to charge supra-competitive rates to end-users for terminating traffic, then there would be an inefficient incentive to build networks to serve customers that predominantly receive traffic.

[13] Similarly, the ***Notice*** identifies the concern that existing above-cost charges (either for access or reciprocal compensation) may "create incentives for **an** entity that primarily or exclusively receives traffic to claim to be a network rather than to subscribe as an end-user customer." ***Id*** **¶ 18.** Again, setting charges at forward-looking, economic costs is the complete answer to this problem. Properly set rates would provide the "network" only the forward-looking costs of terminating calls and thereby preclude any ability to earn any economically excessive returns. To the extent that end-users are charged by carriers for termination well in excess of the costs carriers incur in terminating calls, it would provide incentive for a entity to claim to be a "network" rather than subscribe as a customer.
(continued . . .)

44. There is one important difference between **CPNP** and **B&K** in this context, however. A **B&K** rule would create new regulatory arbitrage opportunities – opportunities that would not exist under a cost-based CPNP regime.

45. As discussed above, **B&K** breaks the price/cost linkage because it requires the called party to subsidize the costs of calls that are caused by, and therefore attributable to, the calling party. Accordingly, **B&K** would provide carriers with inefficient incentives to build networks that target customers that originate more calls than they receive – *e.g.*, telemarketers. Indeed, the Commission recognized precisely this point in paragraph 1112 of the Local *competition Order* ("bill-and-keep arrangements .are inefficient because they distort carriers' incentives encouraging them to overuse competing carriers' termination facilities by seeking customers the primarily originate traffic").

46. Despite the Commission's past recognition of these basic economic principles, the *Notice* advances a number of reasons why cost-based pricing would not prevent inefficient investment in "receive only" networks. The *Notice* initially notes that:

> Current compensation rates are based on average ILEC costs, and are assessed per-minute, which tends to overstate the costs of calls of longer duration. We therefore believe that as long as LECs are able to recover the costs of delivering such traffic from other LECs, they may have an incentive to target customers for whom termination costs are lower than average, and who predominantly receive traffic.

Notice* ¶ *67.

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Such an incentive is not created by cost-based intercarrier compensation but improper regulation of end-user charges.

47. If all of the factual predicates of this observation were true (and we express no opinion on that subject), there might well be incentives for carriers to seek out customers that are net recipients of traffic in **order to earn reciprocal compensation payments that are larger than the costs of** terminating the traffic. But there would be no such incentive if the reciprocal Compensation rates were properly based on the forward-looking, economic costs of terminating traffic. Under the assumptions of the ***Notice's*** example, that would mean simply recognizing that the costs of terminating a call are not entirely usage sensitive and that longer calls may therefore have lower per minute costs than shorter calls. We believe that the Commission's existing reciprocal compensation rules already accommodate such rate design specifics. Per minute, per attempt, and capacity-based rate structures are all permissible.

48. The ***Notice*** also states that CPNP can produce distortions because "ILECs seem less able than CLECs to shift any costs of serving ISP customers to other carriers because incumbent LECs serve many more ISP subscribers and would only receive reciprocal compensation when a CLEC customer calls an ISP served by an ILEC." ***Id*** Although this statement is far from clear, we take it to mean that the ***Notice*** is concerned that only competitive LECs can take advantage of above-cost reciprocal compensation rates for terminating ISP traffic on the ground that incumbent LECs have such a large customer base that when they serve ISPs they mostly terminate traffic from their own customers and therefore will not collect reciprocal compensation payments. We agree that a regime that systematically favored one group of LECs over another would raise significant policy concerns. But the entire premise of this argument is that reciprocal compensation rates exceed the relevant costs, thereby creating regulatory arbitrage opportunities. The cure for this ill is both obvious and simple: cap reciprocal compensation rates at forward-looking costs. As we have discussed above, properly-